

## AMERICAN SCENE

A slice of life in the USA

## Washing away water woes

In Kansas, new machines get clothes clean while saving enough water to keep the cattle and the people from going dry

By Debbie Howlett USA TODAY

BERN, Kan.

I takes, on average, 46 gallons of water to wash a load of laundry. That's just about what one of Neil Hartter's cows drinks on a hot summer day.

Coincidence? Probably.

But after a stretch of 33 bone-dry days, the comparison reveals an essential truth of farming here: Thirsty cows and crops take priority over dirty overalls.

That's just why the Department of Energy came to this speck of a farm town on the dusty Plains. With a limited water supply that has kept Bern just this side of parched for 130 years, the town provided an ideal site to test a new watersaving technology.

And this year the livestock are sated. The fields of red milo are lush. And most of the 204 residents of Bern are wearing clean clothes.

The reason: Horizontal axis washing machines.



Photos by Ed Zurga, AP, for USA TODAY

**Embracing technology:** Verona Strahm says it took awhile to adjust to the new washer, but now she plans to keep it after the study is over. 'It really saves water, and that's what's important,' she says.



A matter of priorities: When water in the town of Bern, Kan., runs low, Neil Hartter's cattle take precedence over his laundry.

As part of a Department of Energy study, 101 households here have been using the innovative washers donated by Maytag. They differ from toploading machines because they have no agitator in the middle of the tub. Instead, the tub is tilted slightly forward and tumbles like a dryer. That allows washing with less water, and also reduces drying time.

Prelimary results, to be announced at a town picnic Saturday, show Bern has used 36% less water and 57% less electricity since the machines were installed seven weeks ago.

While washing machines aren't what most would call a sexy technology, the test results have implications well beyond Bern and could help bring relief to other water-starved areas of the West.

"This has potentially enormous impact," Energy Sectretary Federico Pena says.

For instance, the average family doing nine loads of laundry a week could save 6,900 gallons of water a year. That's more water than the average person drinks in a lifetime.

In Bern, where water is as scarce as traffic jams, such savings could keep it from withering away in a drought. Even during a non-drought year, in the warm evenings before the fall harvest, dust blankets everything with a fine grit and the chirping of grasshoppers fills the dead air.

Finding enough fresh water to survive has been an issue here from the time pioneers on the Oregon Trail first settled in the area around 1860 to the Dust Bowl of the 1930s and the big drought of 1988.

There are no nearby rivers or lakes to supply the town. And finding water beneath the fertile soil proved nearly impossible. Since 1967, the town has drilled 56 holes, some of them a mile deep, without finding clean water. Desperate city officials even hired a half-dozen "witchers," people of folk legend who use forked divining rods to find water sources.

Even they came up dry.

"We tried everything," says Hartter, who serves on the county water board. "You can't believe how frustrating it was."

Finally, after action by both the Nebraska and Kansas legislatures, Bern was granted a special exemption to drill a well and pump water from across the Nebraska state line, just three miles north of town.

That well, and two smaller ones, supply 125 million gallons of water a year to Bern and surrounding areas.

It's barely enough.

In the weeks before the new washing machines were installed, town leaders were worried a dry summer might wreak havoc. As part of the study, everybody in town saved a week's worth of laundry and did it all at the same time on a Saturday before the new machines arrived.

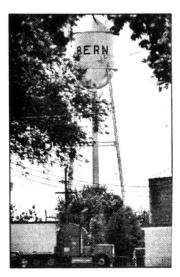
It nearly drained the water tower.

This weekend, they will do the same thing using the new washers for comparison.

Lynette and Ed Strathman, who have three boys, Chad, 14, Jesse, 10, and Tim, 7, expect to have 12 loads. "All the men will be at the picnic. The wives will be home doing laundry," she says.

The Strathmans consider themselves environmentally conscientious. They separate newspapers, glass and aluminum and haul it to a collection site at the town baseball field once a month. But Strathman reserved judgment on her new washing machine until it passed a make or break test: whether Ed's work clothes (he's a welder) and Chad's white football pants came clean. They did.

"It got out the grass stains," she says.



**Dry town:** Water is precious to dusty Bern. Finding enough has long been a challenge.

Ben Hall also was skeptical, particularly of the claims of enormous water savings.

"I don't trust nobody," said Hall, a retired pipefitter who remembers his mother doing laundry with a tub and washboard. So, he conducted his own test, carefully recording the readings from the digital monitors in a notebook separate from the one the Department of Energy supplied.

The last 12-pound load of clothes he washed before the study used eight gallons of hot water and 30 gallons of cold.

The new washer used 4.4 gallons of hot water and 15.3 gallons of cold — a little over half as much.